

**Amendment After Allowance under 37 CFR 1.312**

Date filed **August 1, 2006**

U.S. Patent Application Serial No. **10/807,516**

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1           Claim 1 (Previously Presented): A reamer apparatus for a ground boring machine,  
2           comprising:

3           a substantially hollow conical reamer main body which diameter reduces towards a drawing  
4           side;

5           a rod connecting portion provided at a narrow diameter end portion of the reamer main body  
6           for connecting with a rod; and

7           a coupling structure provided on an opposite side of the rod connecting portion, wherein  
8           the coupling structure has a swivel joint that allows rotation of the reamer main body with  
9           respect to a buried pipe,

10          and a main portion of the swivel joint is substantially accumulated and extends within the  
11          reamer main body.

1           Claim 2 (Previously Presented): The reamer apparatus for a ground boring machine  
2           according to claim 1, wherein

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3           the swivel joint is arranged in that a rotating side on the reamer main body side and a non-  
4           rotating side on the side of the buried pipe are sealed by a floating seal.

1           Claim 3 (Currently Amended): A reamer apparatus for a ground boring machine,  
2           comprising:

3           a substantially hollow conical reamer main body which diameter reduces towards a drawing  
4           side;

5           a rod connecting portion provided at a narrow diameter end portion of the reamer main body  
6           for connecting with a rod;

7           a coupling structure provided on an opposite side of the rod connecting portion, wherein

8           a cover for preventing intrusion of sediments is attached to the reamer main body to  
9           encompass an outer peripheral side of the coupling structure by the cover for preventing intrusion  
10          of sediments while a clearance is formed between a buried pipe and an end portion of the cover ~~and~~  
11          ~~a buried pipe for preventing intrusion of sediments~~ on a side that is opposite to the reamer main body  
12          side.

1           Claim 4 (Previously Presented): The reamer apparatus for a ground boring machine  
2           according to claim 3, wherein

3           the cover for preventing intrusion of sediments is arranged in that an end portion thereof on  
4           the reamer main body side is plunged into the reamer main body.

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1           Claim 5 (Previously Presented): A reamer apparatus for a ground boring machine,  
2           comprising:

3           a substantially hollow conical reamer main body which diameter reduces towards a drawing  
4           side, wherein

5           a partitioning member is disposed in the vicinity of an aperture of the reamer main body on  
6           a side of a buried pipe,

7           a passage is formed within the reamer main body through which drilling fluid is supplied for  
8           injecting a drilling fluid to a portion to be drilled through emission ports, and

9           an injection tip is provided at the partitioning member through which the drilling fluid that  
10          has entered the passage is discharged to the side of the buried pipe.

1          Claim 6 (Previously Presented): A reamer apparatus for a ground boring machine,  
2          comprising:

3          a substantially hollow conical reamer main body which diameter reduces towards a drawing  
4          side;

5          a rod connecting portion provided at a narrow diameter end portion of the reamer main body  
6          for connecting with a rod; and

7          a coupling structure provided on an opposite side of the rod connecting portion,  
8          wherein:

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9           the coupling structure has a swivel joint that allows rotation of the reamer main body with  
10   respect to a buried pipe,  
11           and a main portion of the swivel joint is substantially accumulated in the reamer main body,  
12   and  
13           the swivel joint is arranged in that a rotating side on the reamer main body side and a non-  
14   rotating side on the side of the buried pipe are sealed by a floating seal.